Lets clear the air

Model 60 / 72 Electrostatic Air Cleaners for Commercial / Industrial Applications

50
Years of Indoor Air Quality

TRION®

Todays Industry demand a packaged Electronic Air Cleaner capable of cleaning industrial and heavy commercial environments. To meet this need, Trion have developed the Model 60 and Model 72 range of air cleaners which can be tailor-made to suit customers requirements.

Equipment construction is of industrial grade and modular/sectionalized design. These features provide the flexibility required to obtain the desired air volume in the best dimensional configuration for any given application.

Ionizing/collection cells of either 600mm or 900mm wide may be used in the make up of any given unit. Therfore, the width of the unit is increased in 300mm increments through the range.

The ionizing/collecting cells are all 600mm high and therefore the height of the unit is increased in 600mm increments through the range. All standard cells are fitted with stainless steel spiked ionizers which give higher air cleaning efficiency and almost unlimited life span.

The Control Panel contains the power packs and if required the Wash System controls. It is designed for remote mounting upto 75 metres away from the base unit. The wash system control can be supplied either semi-automatic (push button initiated) or completely automatic (time clock initiated).

TRION®

TRION ELECTROSTATIC AIR CLEANERS

For more than 50 years, Trion has been a pioneer and market leader in the development, manufacture and marketing of electrostatic air cleaning equipment.

Trion manufactures a complete line of electrostatic air cleaning equipment for domestic, commercial, industrial and marine application.

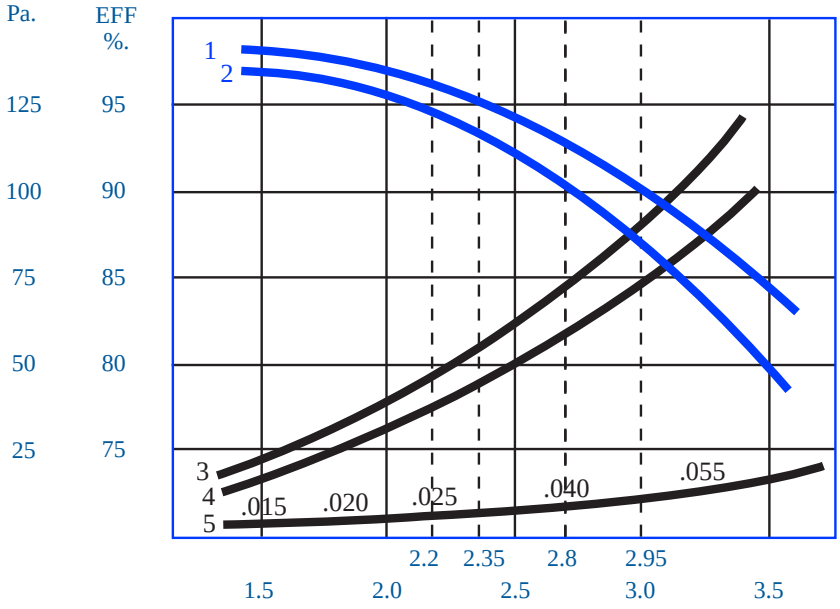
Its products are sold world wide and are used in homes, office buildings, factories, hospitals and ships. People who live and work in a variety of locations around the world - from submarines to skyscrapers - are breathing more easily thanks to Trion.

50 Years of Indoor Air Quality

BM TRADA CERTIFICATION ISO 9001

CE

Efficiency/Resistance



AIR VELOCITY METRES PER SECOND

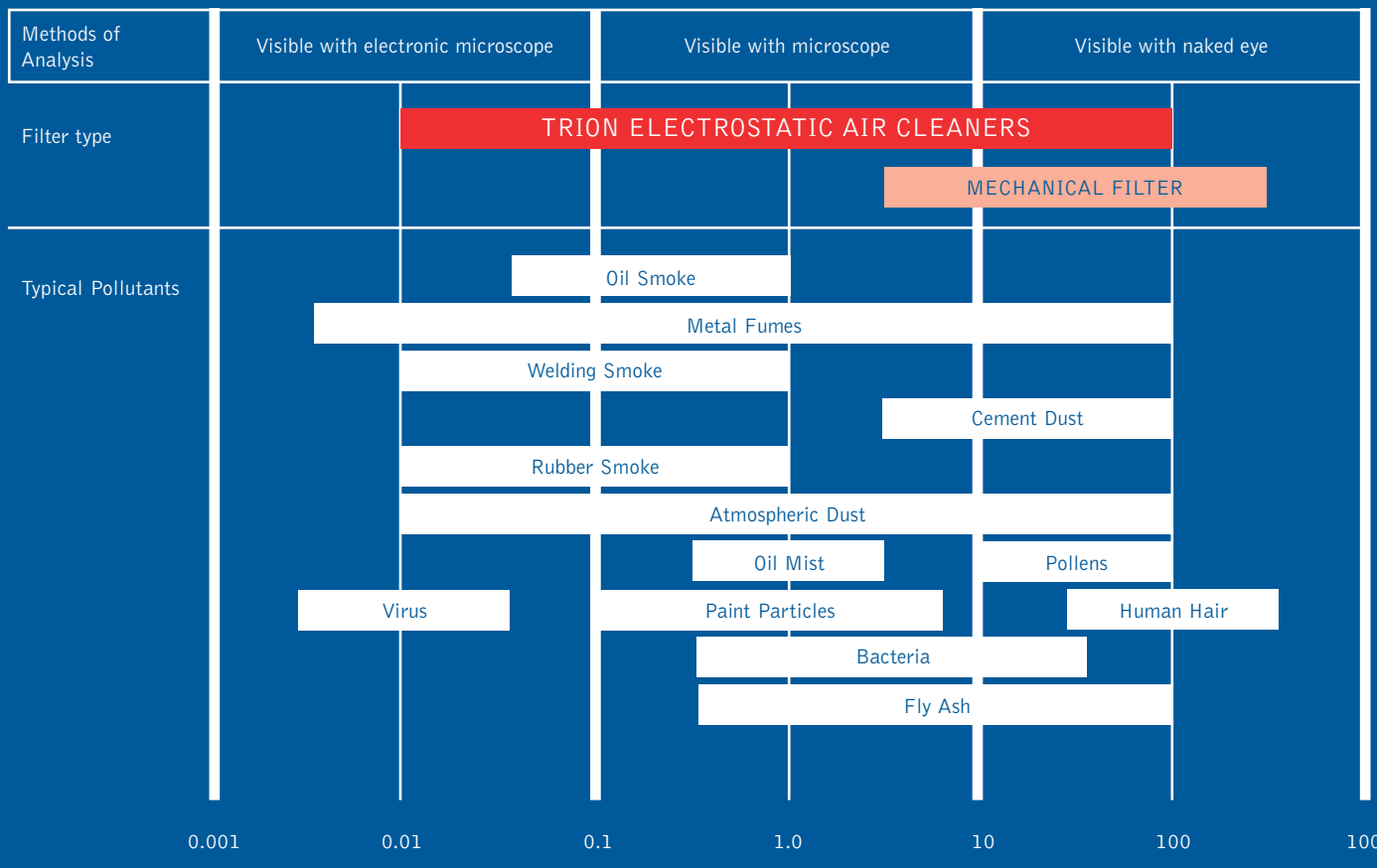
(VOLUME OF AIR FLOW M³/S PER SQ. M OF FACE AREA)

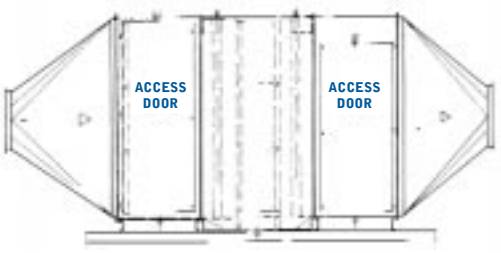
Efficiency - Curves 1 and 2

1. DOP Dioctylphtalate Aerosol Using Penetration Meter
2. ASHRAE Standard 52-72 dust spot Test Method Atmospheric Air

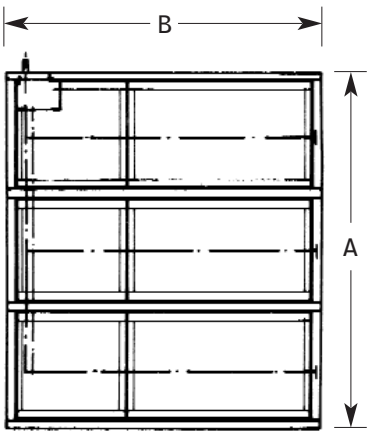
Pressure Drop Access Unit - Curves 3, 4 and 5

3. Cell with 40% open perforated plate front and rear
4. Cell with metal mesh filter front and rear
5. Cell only

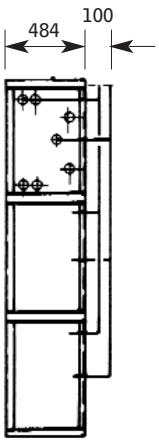




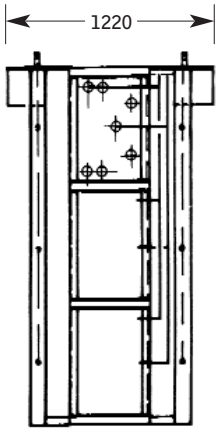
Typical arrangement of unit with inlet and outlet plenums each with access door to filters



Front View



Side View
Model 00



Side View
Model 02

TRION MODEL 60

The Model 60 unit is a modular air cleaner which is supplied in knock down form for assembly on site. The unit is manuafactured to suit the customers requirements for height and width.

Air volumes are from 20000 m^3/hr up to whatever your require, 150,000 m^3/hr units are not uncommon.

The Model 60 can be supplied with or without automatic washing facility, remote power packs and wash controls are supplied for ease of monitoring performance.

Access to the rack mounted collecting components (ionizing collecting cells) and the wash system is via access doors (supplied by others) both up and down stream of the unit. The framework is made up of large sections pre-marked for field assembly. The unit can be supplied with a cabinet or fitted into a purpose built chamber.

Product code

60/72-XXX-XX

- Model Number Designation
- Number of Cells in Height
- Nominal Cell Width in FT (305mm)
- Specific Features

Specific features

The Trion Model 60 Series is available in two standard models

1. Without a Wash System — Model 00
2. With a Wash System — Model 02

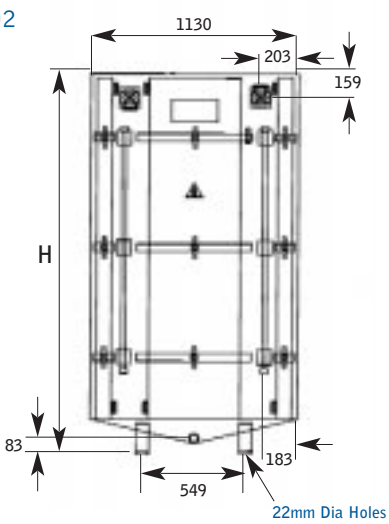
The Trion Model 72 Series is available in three standard models

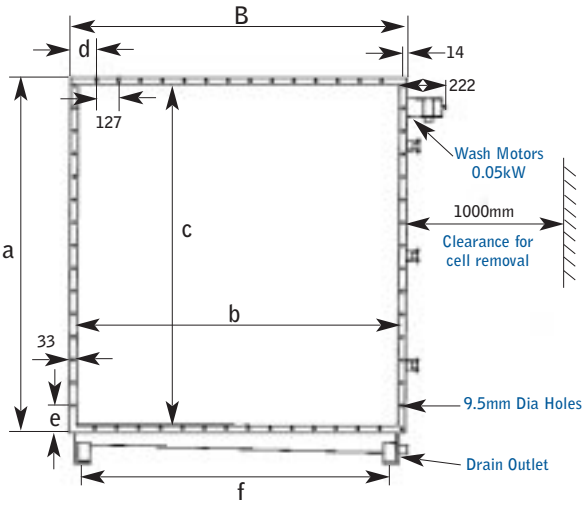
1. Base unit with inlet and outlet collars — Model 00
2. Base unit with inlet and outlet collars pre and after filters — Model 01
3. Base unit with inlet and outlet collars pre and after filters with oscillating wash systems at both the front and rear of unit — Model 02

MODEL 60

MODEL NUMBER	ASHRAE-STA 95% (2.2m/s)
60-304	12990
60-305	17030
60-306	21145
60-307	23520
60-308	27640
60-309	31680
60-404	17265
60-405	22730
60-406	28195
60-407	31365
60-408	36830
60-504	21620
60-505	28435
60-506	35245
60-507	39285
60-604	25980
60-605	34055
60-606	42295
60-704	30255
60-705	39840

Model 02





TRION MODEL 72

The Model 72 unit is a large commercial / industrial packaged air cleaner. which can be supplied in twenty different sizes from 2140 - 48900 m³/hr.

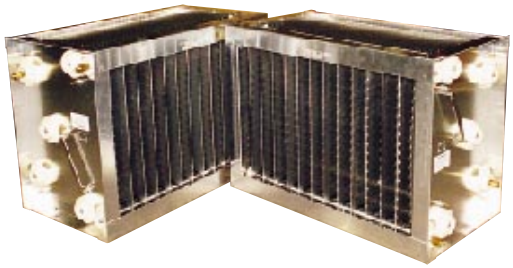
The unit can be supplied in many different variations i.e the unit can be supplied with oscillating wash systems with automatic or manual operation and with or without pre-filters.

Access to the collecting components (ionizing - collecting cells) and the pre-after filters is located on one end of the unit perpendicular to the direction of air flow and may be specified on either side of the unit.

The Trion Model 72 Series is available in three standard models

1. Base unit with inlet and outlet collars — Model 00
2. Base unit with inlet and outlet collars pre and after filters — Model 01
3. Base unit with inlet and outlet collars pre and after filters with oscillating wash systems at both the front and rear of unit — Model 02

AIR VOLUMES m³/hr			*CELL FACE AREA M²	NO. & TYPE OF CELLS	MAX CURRENT MA	OVERALL DIMENSIONS mm		+ WEIGHT Kgs		WATER CONSUMPTION LITRES/MIN	DETERGENT CONSUMPTION PER WASH LITRES/MIN
NDARD 52-76	(D.O.P)										
90%	95%	90%			+ IONIZER VE	HEIGHT A	WIDTH B	00	02		
(2.8m/s)	(2.35m/s)	(2.95m/s)									
16530	13875	17415	1.64	6 x S	16.0	2014	1217	374	520	91	3.8
21670	18189	22835	2.15	3 x S, 3 x L	21.2	2014	1500	422	589	114	4.9
26915	22590	28355	2.67	6 x L	26.4	2014	1783	510	657	147	6.4
29940	25125	31540	2.97	6 x S, 3 x L	29.4	2014	2066	623	781	170	6.8
35180	29525	37065	3.49	3 x S, 6 x L	34.4	2014	2349	691	849	193	8.3
40320	33840	42480	4.00	9 x L	39.6	2014	2632	758	917	215	9.5
21975	18445	23150	2.18	6 x S, 6 x L	21.6	2671	1217	487	634	121	4.9
28930	24280	30480	2.87	4 x S, 4 x L	28.4	2671	1500	623	781	151	6.8
35885	30120	37810	3.56	8 x L	35.2	2671	1783	713	883	197	8.3
39915	33500	42055	3.96	8 x S, 4 x L	39.2	2671	2066	792	962	227	9.1
46870	39340	49385	4.65	4 x S, 8 x L	46.0	2671	2349	883	1053	257	10.9
27520	23095	28995	2.73	10 x S	26.8	3328	1217	657	815	151	6.4
36185	30370	38125	3.59	5 x S, 5 x L	35.4	3328	1500	747	928	189	8.3
44855	37650	47260	4.45	10 x L	44.0	3328	1783	860	1042	246	10.6
49995	41960	52675	4.96	10 x S, 5 x L	49.0	3328	2066	962	1155	284	11.4
33060	27750	34835	3.28	12 x S	32.0	3985	1217	792	962	182	7.6
43345	36380	45665	4.30	6 x S, 6 x L	42.4	3985	1500	917	1098	227	10.2
53825	45175	56710	5.34	12 x L	52.8	3985	1783	1041	1234	272	12.5
38505	32315	40570	3.82	14 x S	37.3	4642	1217	860	1042	211	8.7
50700	42555	53420	5.03	7 x S, 7 x L	49.5	4642	1500	1019	1200	265	11.7



Trion Ionizing / Collector Cells

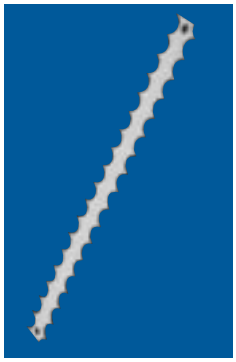
Type	600mm	900mm
Height	610mm	610mm
Width	562mm	845mm
Depth	457mm	457mm
Weight	34kg	52kg
Face Area	0.34m²	0.51m²
Plate spacing	8.08mm	8.08mm
Insulation diameter	95mm	95mm
Operating voltage	14 / 7kv	14 / 7kv
Ionizer type	Spiked Ionizer	Spiked Ionizer

Tri-Dex Detergent System

Type	115 Litres	200 Litres
Height	1170mm	1320mm
Width	635mm	686mm
Depth	635mm	686mm
Weight empty	23kg	52kg
Weight full	125kg	266kg
Pump output	11.4 litres/min	25 litres/min
Motor Input	110/230/1ph/50Hz	110/230/1ph/50Hz
Kw	0.25	0.6
Max input current	7.2 amp	13.8 amp

MODEL 72

MODEL NUMBER	AIR VOLUMES m³/hr				*FREE CELL FACE AREA M²	NO. & TYPE OF CELLS	MAX CURRENT MA	TOTAL WIDTH 00-01 MODELS mm	TOTAL WIDTH 02 MODELS mm	TOTAL HEIGHT H mm	INLET WIDTH B mm	INLET HEIGHT a mm
	ASHRAE-STANDARD 52-76		(D.O.P)				+ IONIZER VE					
	95% (2.2m/s)	90% (2.8m/s)	95% (2.35m/s)	90% (2.95m/s)								
72-102	2140	2720	2285	2870	0.27	1 x S	2.7	819	941	886	719	727
72-103	3565	4535	3810	4780	0.45	1 x L	4.4	1103	1225	886	1003	727
72-104	4355	5545	4655	5840	0.55	2 x S	5.3	1381	1503	886	1281	727
72-105	5700	7260	6090	7645	0.72	1 x S, 1 x L	7.1	1665	1787	886	1565	727
72-106	7130	9070	7615	9560	0.90	2 x L	8.8	1950	2072	886	1850	727
72-107	7920	10080	8460	10620	1.00	2 x S, 1 x L	9.7	2227	2349	886	2127	727
72-108	9190	11090	9305	11685	1.16	1 x S, 2 x L	11.5	2512	2634	886	2412	727
72-109	10615	12800	10745	13490	1.34	3 x L	13.2	2796	2918	886	2696	727
72-203	7130	9070	7615	9560	0.9	2 x L	8.8	1103	1225	1511	1003	1352
72-204	8635	11090	9305	11685	1.09	4 x L	10.7	1381	1503	1511	1281	1352
72-205	11405	14515	12185	15295	1.44	2 x S, 2 x L	14.1	1665	1787	1511	1565	1352
72-206	14260	18145	15230	19115	1.80	4 x L	17.6	1950	2072	1511	1850	1352
72-207	15840	20160	16920	21240	2.00	4 x S, 2 x L	19.5	2227	2349	1511	2127	1352
72-208	18215	22180	18615	23365	2.3	2 x S, 4 x L	22.9	2512	2634	1511	2412	1352
72-209	21145	25605	21490	26975	2.67	6 x L	26.4	2796	2918	1511	2696	1352
72-303	10615	12800	10745	13490	1.34	3 x L	13.2	1103	1225	2137	1003	1978
72-304	12990	18145	15230	19115	1.64	6 x L	16.0	1381	1503	2137	1281	1978
72-305	17030	21670	18189	22835	2.15	3 x S, 3 x L	21.2	1665	1787	2137	1565	1978
72-306	21145	25605	21490	26975	2.67	6 x L	26.4	1950	2072	2137	1850	1978
72-307	23520	29940	25125	31540	2.97	6 x S, 3 x L	29.2	2227	2349	2137	2127	1978
72-308	27640	33265	27920	35045	3.49	3 x S, 6 x L	34.4	2512	2634	2137	2412	1978
72-309	31680	38405	32235	40465	4.00	9 x L	39.6	2796	2918	2137	2696	1978
72-310	34215	43545	36550	45890	4.32	6 x S, 6 x L	42.4	3072	3194	2137	2972	1978



Trion Control Panel

Type	Trion Industrial Controller
Height	762mm
Width	762mm
Depth	254mm
Weight	58kg
Input Voltage	230/1ph/50Hz
Maximum Current	25 Amps
Ionizer Voltage	12.5kv
Collector Voltage max.	6.5kv
Milliamps	5.7 Ma
Clock	Digital 7-day with battery back-up

Trion Spiked Ionizing Plates

Most electronic air cleaner problems and costs are the result of broken ionizing wires. These thin wires are often damaged due to heavy loading conditions or during routine manual cleaning.

Trion's stainless steel saw blade type plates are fitted as standard on all the Trion Model 60 and 72 Series units.

They have the advantage over standard tungsten wires, with more effective air cleaning efficiency and an almost unlimited life span.

Strong and durable these blades will not break which means they eliminate all the problems associated with broken ionizing wires and save maintenance time and money.

INSIDE FLANGE WIDTH b mm	INSIDE FLANGE HEIGHT c mm	d mm	e mm	HOLE CTRS f mm	+ WEIGHT Kgs 00-001	WEIGHT Kgs 02	WATER CONSUMPTION LITRES/MIN	DETERGENT CONSUMPTION PER WASH LITRES/MIN
653	661	42	46	597	185	222	19	0.9
937	661	57	46	881	208	254	26	1.3
1215	661	69	46	1159	224	270	38	1.9
1499	661	84	46	1443	262	326	45	2.3
1784	661	99	46	1727	319	392	53	2.6
2061	661	48	46	2005	342	412	64	3.2
2346	661	63	46	2290	362	430	72	3.6
2630	661	78	46	2575	385	462	84	4.1
937	1286	57	41	881	319	353	53	2.6
1215	1286	69	41	1159	362	405	72	3.6
1499	1286	84	41	1443	387	464	90	4.5
1784	1286	99	41	1727	430	555	110	5.5
2061	1286	48	41	2005	520	621	129	6.4
2346	1286	63	41	2290	566	664	144	7.1
2630	1286	78	41	2575	612	722	163	8.1
937	1912	57	36	881	362	428	84	4.1
1215	1912	69	36	1159	430	550	110	5.5
1499	1912	84	36	1443	498	589	136	6.8
1784	1912	99	36	1727	566	657	163	8.1
2061	1912	48	36	2005	634	747	189	9.4
2346	1912	63	36	2290	702	838	220	10.9
2630	1912	78	36	2575	770	929	246	12.3
2906	1912	89	36	2850	840	1008	272	13.6

TRION®

THE AIR TREATMENT SPECIALISTS

OTHER TRION PRODUCTS

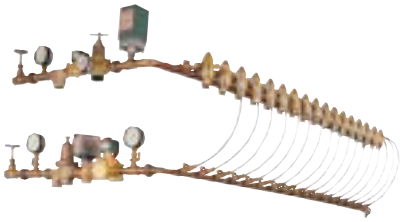
INDUSTRIAL
(PACKAGED ELECTRO STATIC AIR CLEANERS)

INDUSTRIAL
(CARTRIDGE AIR CLEANERS)

INDUSTRIAL
(MEDIA AIR CLEANERS)

COMMERCIAL
(ELECTRO STATIC AIR CLEANERS)

HUMIDIFICATION
(HUMIDIFIERS)



PORTABLE
(ELECTRO STATIC AIR CLEANERS)

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